CLAIMS

What we claim is:

1. A treated substrate comprising

a finish comprising compounds selected from the group consisting of metal particle-containing compounds, metal ion-containing compounds, metal-ion generating compounds, and any combinations thereof, and

a substrate selected from the group consisting of a yarn, a fabric comprised of individual fibers, and a film;

wherein said finish is adhered to at least one portion of the surface of said substrate;

wherein said at least one portion of said treated substrate retains at least about 30% of said adhered to finish after 10 washes as performed in accordance with the wash procedure of AATCC Test Method 130-1981; and

wherein said treated substrate is electrically non-conductive; and wherein said finish exhibits antimicrobial properties.

2. The treated substrate of Claim 1 wherein said substrate is an individual yarn.

3. The treated substrate of Claim 1 wherein said substrate is a textile fabric.

4. The treated substrate of Claim 1 wherein said substrate is a film.

5. The treated substrate of Claim 1 wherein said finish comprises metal particles.

6. The treated substrate of Claim 1 wherein said finish comprises metal-ion generating compounds.

7. The treated substrate of Claim 5 wherein said finish comprises a metal selected from one of the transition metals.

8. The treated substrate of Claim 7 wherein said transition metal is selected from the group consisting of silver and zinc.

9. The treated substrate of Claim 6 wherein said finish comprises a metal selected from one of the transition metals.

10. The treated substrate of Claim 9 wherein said transition metal is selected from the group consisting of silver and zinc.

11. A process for producing the treated substrate of Claim 1 comprising the steps of

a) providing said substrate;

b) providing said finish composition;

c) applying said finish composition to at least a portion of said substrate; and

d) covering at least the treated substrate portion of step "c" with a binder formulation.

12. The process of Claim 11 wherein said substrate is selected from the group consisting of a textile fabric, a yarn, and a film.

13. A process for producing the coated substrate of Claim 1 comprising the steps of

a) providing said substrate;

b) providing said finish composition, wherein said composition also comprises a binder agent;

c) applying said finish composition to at least a portion of said substrate.

14. The process of Claim 13 wherein said substrate is selected from the group consisting of a yarn and a textile fabric.

15. A treated substrate comprising

a non-electrically conductive treatment comprising metal-containing compounds selected from the group consisting of metal particle-containing compounds, metal ion-containing compounds, and any combinations thereof,

and a substrate selected from the group consisting of a yarn, a fabric comprised of individual yarns, and a film;

wherein said compound or compounds is adhered to at least a portion of the surface of said substrate; and

wherein said treated substrate exhibits a log kill rate for *Staphylococcus aureus* of at least 1.5 and a log kill rate for *Klebsiella pneumoniae* of at least 1.5, both as tested in accordance with AATCC Test Method 100-1993 for 24 hour exposure, after at least 10 washes, said washes performed in accordance with the wash procedure as part of AATCC Test Method 130-1981.

16. The treated substrate of Claim 15 wherein said substrate is an individual yarn.

17. The treated substrate of Claim 15 wherein said substrate is a textile fabric.

18. The treated substrate of Claim 15 wherein said substrate is a film.

19. The treated substrate of Claim 15 wherein said finish comprises metal particles.

20. The treated substrate of Claim 15 wherein said finish comprises metal-ion generating compounds.

21. The treated substrate of Claim 19 wherein said finish comprises a metal selected from one of the transition metals.

22. The treated substrate of Claim 21 wherein said transition metal is selected from the group consisting of silver and zinc.

23. The treated substrate of Claim 20 wherein said finish comprises a metal selected from one of the transition metals.

24. The treated substrate of Claim 23 wherein said transition metal is selected from the group consisting of silver and zinc.

25. A process for producing the treated substrate of Claim 15 comprising the steps of

a) providing said substrate;

b) providing said finish composition;

c) applying said finish composition to at least a portion of said substrate; and

d) covering at least the treated substrate portion of step "c" with a binder formulation.

26. The process of Claim 25 wherein said substrate is selected from the group consisting of a textile fabric, a yarn, and a film.

27. A process for producing the coated substrate of Claim 15 comprising the steps of

a) providing said substrate;

b) providing said finish composition, wherein said composition also comprises

a binder agent;

c) applying said finish composition to at least a portion of said substrate.

28. The process of Claim 27 wherein said substrate is selected from the group consisting of a yarn and a textile fabric.